



City of Grand Rapids Water and Sewer Systems

45th Annual Preliminary Rate Study 2021



Building Blocks of the Revenue Requirement

**Operating and Maintenance
Expense**

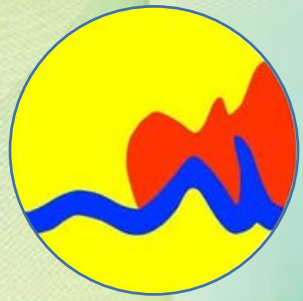
**Assets:
Depreciation
& Return on Investment
(ROI)**

**Other Items:
Combined Sewer Overflow
(CSO) &
Payback Agreements**

**Revenue Credits (Other
Operating Revenue)**

**City and Customer
Community Circuit Breaker
(CCCCB) (Penalty Revenue)**

Billed Volume

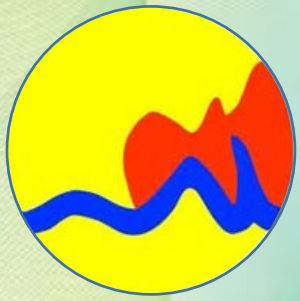


15-Year Historical Rate Changes

Rate Study Year	Water Supply System			Sewage Disposal System		
	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **	Revenue Requirements	% change in RR over prev year	% gross rate incr (decr) **
2006	\$ 39,629,260	6.16%	0.63%	\$ 38,301,107	5.56%	4.94%
2007	40,270,271	1.62%	4.95%	42,742,825	11.60%	15.73%
2008	42,017,680	4.34%	2.45%	47,092,925	10.18%	14.69%
2009	42,939,752	2.19%	9.89%	51,378,424	9.10%	14.04%
2010	41,200,107	-4.05%	-6.27%	49,673,390	-3.32%	-3.30%
2011	41,802,404	1.46%	5.15%	50,082,541	0.82%	2.89%
2012	39,247,442	-6.11%	-4.41%	48,183,681	-3.79%	-2.46%
2013	38,646,748	-1.53%	-4.30%	48,946,212	1.58%	2.46%
2014	40,055,985	3.65%	2.50%	49,962,043	2.08%	2.81%
2015	40,178,439	0.31%	1.00%	49,868,027	-0.19%	0.30%
2016	41,187,517	2.51%	3.63%	50,400,344	1.07%	0.36%
2017	42,828,972	3.99%	2.45%	52,319,981	3.81%	3.08%
2018	43,868,464	2.43%	2.71%	54,611,300	4.38%	3.28%
2019	45,752,997	4.30%	2.47%	56,969,417	4.32%	3.49%
2020	45,501,943	-0.55%	0.62%	61,242,290	7.50%	7.92%
2021*	47,692,896	4.82%	4.08%	62,943,059	2.78%	4.00%
AVG	42,051,305	1.59%	1.72%	50,919,848	3.59%	4.64%

* Revenue Requirements per the 2021 Preliminary Rate Study.

** The percentage gross rate increase (decrease) differs from the annual percentage change in Revenue Requirements due to differences in usage volumes/customers/application of Circuit Breaker Annual inflation for the 12 months ending September 2021 was 5.39%



Rate Impact Factors - Water

2021 Water Rate Study Rate Drivers	% Impact
Increases:	
Assets – ROI and Depreciation (LMFP Investments)	3.01%
O&M – Electricity Increases Corrosion Control Study Monroe Reservoir Decommissioning Cost adjustments for Chemical Pricing Increases Private Lead Service Line Replacements (GR) Cayenta Billing System Upgrade	2.44%
Integrated Connection Fees Down	0.07%
Decreases:	
Billed Volume 3-Yr Avg Water Volume Up	(0.70%)
Revenue Credits	(0.44%)
Circuit Breaker Credit (penalty revenue)	(0.30%)
Proposed Rate Increase	4.08%



Rate Impact Factors - Sewer

2021 Sewer Rate Study Rate Drivers	% Impact
Increases:	
O&M – Known cost adjustments, Contract work Ash Lagoon Remediation – EGLE mandate Biodigester Project Related WRRF Plant Work and Equipment PFAS Testing and Analysis Chemical Pricing Increases	6.83%
Billed Volume 3-Yr Avg Sewer Volume Down	1.19%
Revenue Credits	0.46%
Decreases:	
Assets – ROI and Depreciation (Reduction in ROI)	(1.77%)
CSO Debt Service Requirement (GR Only)	(1.89%)
Connection Fees and Surcharge Revenues	(0.53%)
Circuit Breaker Credit (penalty revenue)	(0.29%)
Proposed Rate Increase	4.00%



Assets – ROI and Depreciation



Pretreatment Improvements at the LMFP



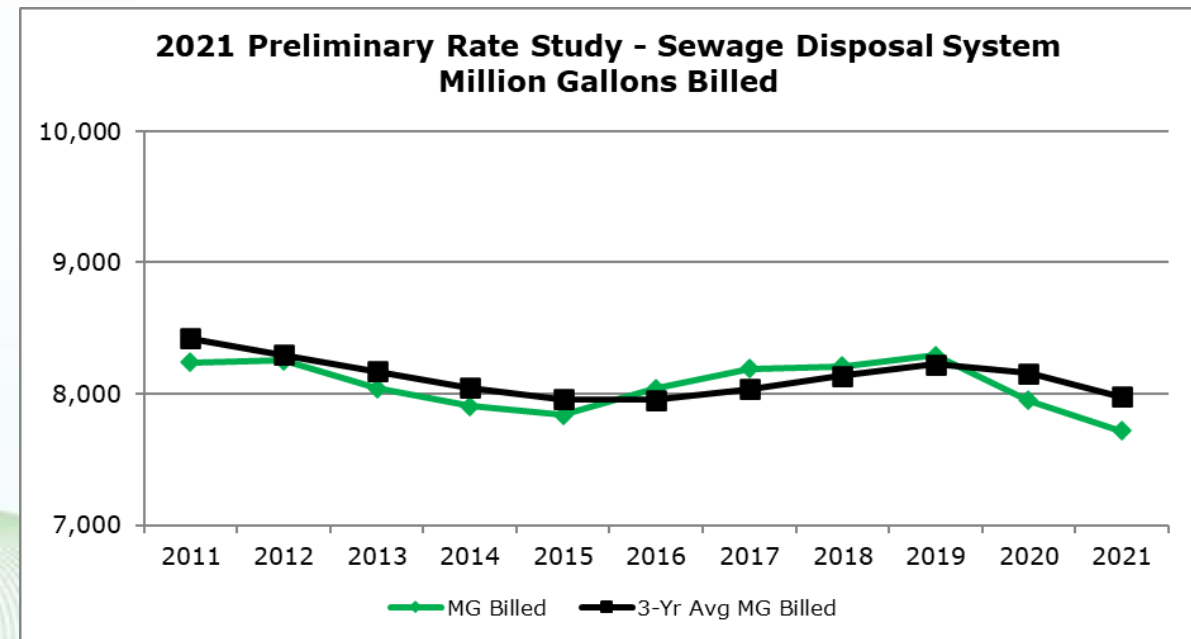
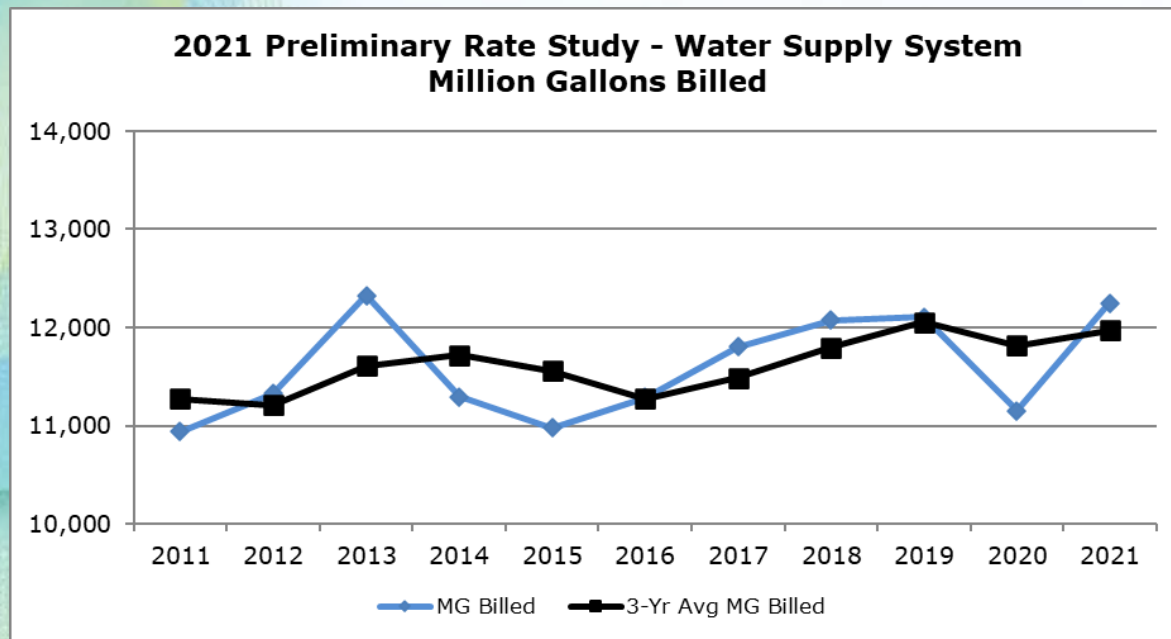
Biodigester and related projects at the WRRF



Billed Volume

- 2021 Water volume up 9.81% over 2020
- 3-Yr Avg Water volume **up** 1.32%

- 2021 Sewer Volume down (2.88%) over 2020
- 3-Yr Avg Sewer Volume **down** (2.18%)





Partner Communities Water Billed Volume FY21

<i>MUNICIPALITY</i>	<i>FY17 VOL BILLED</i>	<i>FY18 VOL BILLED % CHANGE</i>	<i>FY19 VOL BILLED % CHANGE</i>	<i>FY20 VOL BILLED % CHANGE</i>	<i>FY21 VOL BILLED % CHANGE</i>	<i>FY17 - FY21 % CHANGE</i>
GRAND RAPIDS	6,294,410	6,346,480 0.83%	6,417,706 1.12%	5,899,570 -8.07%	6,288,343 6.59%	-0.10%
WALKER	893,794	939,897 5.16%	929,719 -1.08%	835,703 -10.11%	952,327 13.96%	6.55%
KENTWOOD	1,314,005	1,377,822 4.86%	1,342,574 -2.56%	1,190,449 -11.33%	1,305,704 9.68%	-0.63%
CASCADE TWP	708,744	739,323 4.31%	695,896 -5.87%	585,011 -15.93%	686,897 17.42%	-3.08%
GRAND RAPIDS TWP	495,024	541,008 9.29%	545,871 0.90%	462,801 -15.22%	573,570 23.93%	15.87%
TALLMADGE TWP	30,912	37,179 20.27%	41,592 11.87%	37,831 -9.04%	48,587 28.43%	57.18%
EAST GRAND RAPIDS	419,574	419,637 0.02%	413,246 -1.52%	422,907 2.34%	430,073 1.69%	2.50%
OTTAWA COUNTY**	1,167,086	1,209,789 3.66%	1,280,873 5.88%	1,299,136 1.43%	1,492,668 14.90%	27.90%
ADA TWP	482,549	463,080 -4.03%	438,337 -5.34%	417,313 -4.80%	466,832 11.87%	-3.26%
TOTAL	11,806,098	12,074,215 2.27%	12,105,814 0.26%	11,150,721 -7.89%	12,245,001 9.81%	3.72%



Partner Communities Sewer Billed Volume FY21

<i>MUNICIPALITY</i>	<i>FY17 VOL BILLED</i>	<i>FY18 VOL BILLED % CHANGE</i>	<i>FY19 VOL BILLED % CHANGE</i>	<i>FY20 VOL BILLED % CHANGE</i>	<i>FY21 VOL BILLED % CHANGE</i>	<i>FY17 - FY21 % CHANGE</i>
GRAND RAPIDS	4,942,953	4,931,223 -0.24%	4,998,134 1.36%	4,782,754 -4.31%	4,706,480 -1.59%	-4.78%
WALKER	650,975	646,233 -0.73%	637,561 -1.34%	596,412 -6.45%	604,510 1.36%	-7.14%
KENTWOOD	1,032,553	1,069,319 3.56%	1,060,147 -0.86%	976,528 -7.89%	1,001,673 2.57%	-2.99%
CASCADE	358,774	353,054 -1.59%	357,434 1.24%	330,505 -7.53%	335,188 1.42%	-6.57%
GRAND RAPIDS TWP	289,525	284,378 -1.78%	293,245 3.12%	278,126 -5.16%	284,929 2.45%	-1.59%
TALLMADGE	21,454	24,350 13.50%	27,276 12.02%	25,812 -5.37%	27,089 4.95%	26.27%
WRIGHT TWP	19,465	18,885 -2.98%	19,834 5.03%	20,025 0.96%	12,023 -39.96%	-38.23%
EAST GRAND RAPIDS	393,511	441,259 12.13%	461,287 4.54%	498,507 8.07%	359,057 -27.97%	-8.76%
ADA TWP	315,417	296,101 -6.12%	291,737 -1.47%	292,738 0.34%	264,616 -9.61%	-16.11%
CALEDONIA TWP	31,631	29,741 -5.98%	28,715 -3.45%	25,910 -9.77%	21,012 -18.90%	-33.57%
GAINES TWP	133,866	113,527 -15.19%	115,345 1.60%	122,183 5.93%	103,780 -15.06%	-22.47%
TOTAL	8,190,124	8,208,070 0.22%	8,290,715 1.01%	7,949,500 -4.12%	7,720,357 -2.88%	-5.74%



Circuit Breaker Calculation

	Water/Sewer
City & Customer Community Circuit Breaker (CCCCB): Penalty Revenue (87.5%)*	\$926,790
Individual Circuit Breaker (ICB):	
Penalty Revenue (12.5%)	132,399
Other Non-op Revenue	80,000
Total ICB	\$212,399
Total Circuit Breaker Funds	\$1,139,189
*CCCCB funds used in 2021 Rate Study	\$924,001

Kent County Community Action (KCCA) facilitates the ICB on behalf of the City of Grand Rapids. Through Q3 of 2021, assistance is at 85% of Q3 2020 levels, which were historic lows. Total remaining ICB balance for 2021 is \$143,132.



Additional Assistance Resources

2020 Senate Bill 690 established \$25M in funding for bill assistance:

- 1st round was \$360,876 (1,110 households served).
- 2nd round was \$76,924 (284 households served).

COVID Emergency Rental Assistance (CERA)

KCCA has received additional funds through MSHDA to assist rental households who have incomes less than 80% of Area Median Income (AMI) and are facing pandemic-related hardships with:

- Eviction Notices/past-due rent
- Utility assistance for tenant supplied electricity, home heating (any type of fuel), water, sewer and trash (if billed along with another utility).
- \$300 internet stipend for households that have home internet and include a recent internet bill/statement in their application package.



Prelim 2022 Rate Impact by Community

Retail Communities: charges assessed directly to User based on water consumption (except for Wright Twp – REUs). Readiness to Serve (RTS) based on meter size and Commodity based on volume. City of GR maintains assets and bills users directly.

Wholesale Communities: charges assessed directly to Wholesale Community based on water consumption measured through a master meter at the point of service in the customer community. Readiness to Serve (RTS) based on non-integrated system requirements and Commodity based on volume. Customer community maintains assets and bills users directly.

	WATER (1)		SEWER (1)	
	AMOUNT	PERCENT	AMOUNT	PERCENT
RETAIL COMMUNITIES				
GRAND RAPIDS	\$ 1,320,344	4.95%	\$ 1,038,156	2.54%
WALKER	178,450	4.95%	317,420	6.08%
KENTWOOD	223,327	4.95%	421,109	8.64%
CASCADE TWP	96,380	2.74%	198,958	6.95%
GRAND RAPIDS TWP	(8,935)	-0.35%	31,901	1.10%
TALLMADGE TWP	5,911	2.71%	9,740	2.06%
WRIGHT TWP	N/A	N/A	12,854	4.01%
WHOLESALE COMMUNITIES				
EAST GRAND RAPIDS	8,972	1.06%	154,384	13.56%
ADA TWP	7,472	0.54%	106,370	7.26%
OTTAWA COUNTY	36,982	1.47%	NA	NA
GAINES TWP	N/A	N/A	94,004	41.88%
CALEDONIA TWP	N/A	N/A	34,849	19.94%
SYSTEM	\$ 1,868,903	4.08%	\$ 2,419,745	4.00%

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCCB).

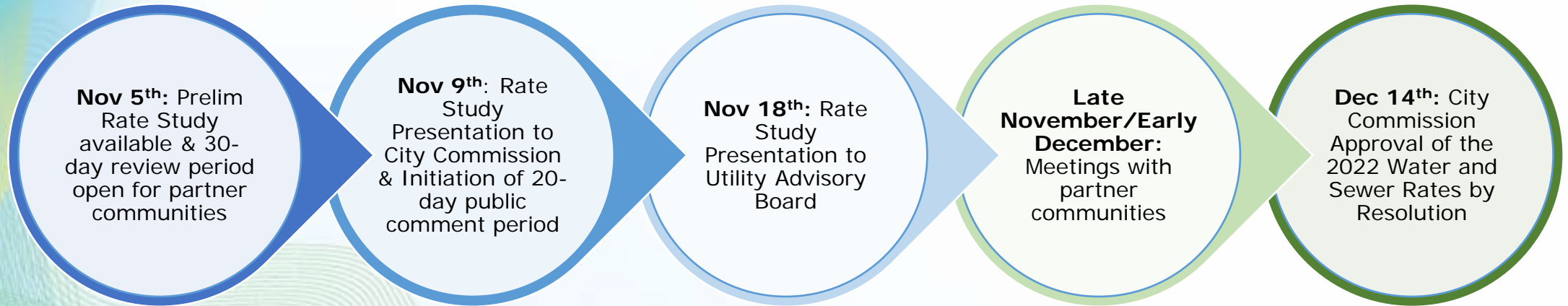


Preliminary 2022 Quarterly Bill

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2021</u>	<u>2022</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 95.10	\$ 99.90	\$ 4.80	5.05%
SEWER	133.06	136.25	3.19	2.40%
	<u>\$ 228.16</u>	<u>\$ 236.15</u>	<u>\$ 7.99</u>	3.50%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 94.50	\$ 99.36	\$ 4.86	5.14%
SEWER	151.07	160.26	9.19	6.08%
	<u>\$ 245.57</u>	<u>\$ 259.62</u>	<u>\$ 14.05</u>	5.72%
RATIO TO GR	1.08	1.10		
KENTWOOD				
WATER	\$ 96.27	\$ 101.37	\$ 5.10	5.30%
SEWER	87.22	94.67	7.45	8.54%
	<u>\$ 183.49</u>	<u>\$ 196.04</u>	<u>\$ 12.55</u>	6.84%
RATIO TO GR	0.80	0.83		
CASCADE TWP				
WATER	\$ 135.87	\$ 139.89	\$ 4.02	2.96%
SEWER	172.91	184.91	12.00	6.94%
	<u>\$ 308.78</u>	<u>\$ 324.80</u>	<u>\$ 16.02</u>	5.19%
RATIO TO GR	1.35	1.38		
GRAND RAPIDS TWP				
WATER	\$ 112.05	\$ 111.81	\$ (0.24)	-0.21%
SEWER	147.63	149.34	1.71	1.16%
	<u>\$ 259.68</u>	<u>\$ 261.15</u>	<u>\$ 1.47</u>	0.57%
RATIO TO GR	1.14	1.11		
TALLMADGE TWP				
WATER	\$ 87.60	\$ 90.96	\$ 3.36	3.84%
SEWER	255.70	261.10	5.40	2.11%
	<u>\$ 343.30</u>	<u>\$ 352.06</u>	<u>\$ 8.76</u>	2.55%
RATIO TO GR	1.50	1.49		



2021 Water & Sewer Rate Study Schedule



Rate studies available online at:

<https://www.grandrapidsmi.gov/Government/Departments/Water-System/Water-and-Sewer-Rate-Study>